



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,938	10/29/2003	Kazuto Washio	2091-0300P	6148

2292 7590 05/15/2006

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
----------

YANG, RYAN R

ART UNIT	PAPER NUMBER
----------	--------------

2628

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/694,938	<b>Applicant(s)</b> WASHIO, KAZUTO	
	<b>Examiner</b> Ryan R. Yang	<b>Art Unit</b> 2628	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/22/2006 has been entered.
2. This action is responsive to communications: Amendment, filed on 3/22/2006. This action is non-final.
3. Claims 1-18 are pending in this application. Claims 1, 4, 7 and 10-15 are independent claims. In the Amendment, filed on 3/22/2006, claims 1, 4, 7 and 10-15 were amended, and claims 16-18 were added.
4. This application claims foreign priority dated 10/30/2002.
5. The present title of the invention is "Method, apparatus, and program for image processing" as filed originally.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4, 7 and 10-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably

convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The added limitation “wherein the size and the position of the changeable image area is arbitrarily designated” is not described in the specification.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4, 7 and 10-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim language “displaying on the terminal ... a changeable image area in accordance with a specification of a screen ...” with a further limitation “wherein the size and the position of the changeable image area is arbitrarily designated” is contradictory.

***Claim Rejections - 35 USC § 103***

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1, 4, 7 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable in view of Yu et al. (6,684,087) and further in view of Mukai et al. (2002/0006804).

10. In reference to claim 1, Yu et al. explicitly teaches transforming the image requested by a mobile display device into a size suitable to fit well into the screen of said mobile device (Col. 1, line 64 – Col. 2, line 45). Since a mobile device comprises a display screen too small to display normal images created for desktop display monitors,

Art Unit: 2628

Yu et al. allows the original images to be processed to fit specific mobile devices. This often involves reduction of the original image, which allows the image to be transmitted faster and without delay. In addition, details of the original image are not sacrificed since Yu et al. allows the user to click on portions of the reduced image in order to display the detailed version of said portion. In addition, Yu et al. explicitly teaches fetching the image requested by the mobile device, which specifically is receiving selection of one of a plurality of image data sets by using a terminal (col. 7, lines 1-11). Since the image would not be properly displayed on a mobile display device, said image is preprocessed according to the parameters of mobile device provided in the associated account. The parameters used may include the screen size and the type (Col. 7, line 12-23; Col. 7, line 57 – Col. 8, line 18 and Col. 8, lines 33-63). Said parameters provided in the associated account must be received by the account manager in order to preprocess said image properly. Thus, said receiving parameters specifically are receiving specification of a model of a mobile terminal to which a processed image data set generated from the selected one of the plurality of image data sets is sent. FIG. 4 explicitly shows the Device ID (402), Subscriber ID (404) and Device Specification (410), which specifically are specification of a model of a mobile terminal as recited in the current claim. In addition, Yu et al. explicitly teaches that the account manager (312) may use the IP address of the mobile display device as the device ID, and thus said destination address for sending the processed image data set is received by the account manager. In addition, said destination address of the mobile device must be known in order to communicate and transmit the request image to said

Art Unit: 2628

mobile device. Further, once the IP address is identified by the account manager, said destination address has been received. Also, preprocessing said requested image to fit the mobile device and displaying said preprocessed image as applied above (Col. 7, line 12-25 and FIG. 5B) specifically is displaying on the terminal the selected one of the image data sets and an image area in accordance with a specification of a screen of the mobile terminal that has been specified. Said requested image is preprocessed according to the device specification found in the associated account information.

Yu et al. further teaches that said preprocessed image is subdivided into a plurality of parts, and once the user clicks on said desired portion, said desired portion is activated and detailed image of said desired portion is displayed (Col. 7, line 24 – Col. 8, line 32 and FIG. 5A-6B). When said the user clicks on the desired portion, specification of a change in position and/or size of the image area are received by the account manager. The display area is changed and detailed image of said new display area is transmitted to the mobile device and displayed. When said desired portion is transmitted and displayed on the mobile device, all data not associated with the desired portion is cut or removed, and only the desired portion specified by the user is used in generating the new processed image.

Yu discloses a method of displaying image. It is noted that Yu does not explicitly disclose the image area is a changeable image area wherein the size and the position of the changeable image area is arbitrarily designated, however, this is known in the art as taught by Mukai et al., hereinafter Mukai. Mukai discloses a display method for a communication terminal in which size of the image changes depending on the type of

message being send (Figure 25 and Figure 26 where area 134 changes depending on if the voice data is transmitted, [0148]).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teach of Mukai into Yu because Yu discloses a method of displaying image and Mukai further discloses the image size could be changed in order to accommodate different type of data.

11. In regards to claim 4, Yu and Mukai explicitly teach an apparatus for performing the method of claim 1 above.

12. In regards to claim 7, both the mobile device and the link server (300) specifically are computers, and all computers must have computer programs for executing the functions of said computers. Thus, Yu and Mukai explicitly teach a computer program for performing the method of claim 1, which specifically is directed to identical limitation as the instant claim.

13. As per claims 16-18, Yu and Mukai demonstrated all the elements as disclosed in the rejected claims 1, 4 and 7, supra, respectively.

As for displaying the changeable image area, a landscape orientation or a portrait orientation can be selected, since the landscape or portrait orientation is notoriously well in the art (Official Notice), it would have been obvious to one of ordinary skill in the art to incorporate those format in order to optimize the displayed image area.

14. Claims 2-3, 5-6, and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu et al., (6,684,087) in view of Mukai et al. (2002/0006804), and further in view of Kinoshita (2002/0136467).

Art Unit: 2628

15. In regards to claim 2, Yu and Mukai teach the image processing method of claim 1, but Yu and Mukai do not explicitly teach wherein the step of receiving the specification of the change is the step of receiving of the change while an aspect ratio area is maintained in the size in accordance with the specification of the screen of the mobile terminal. It is well known in the art, however, that an aspect ratio area should be maintained in the size in accordance with the specification of the screen of the mobile terminal. If said aspect ratio is not maintained to fit the size of the mobile device, the processed image will be distorted and will appear improper to the user. Although, Yu and Kai are silent to said limitation, it is clear that Yu and Mukai teach processing the image to fit the display size of the mobile device. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to take the teachings of Yu and Mukai to make sure the processed image maintains the aspect ratio of the image area in accordance with the display size of the mobile device. For example, an analogous art, Kinoshita teaches an information terminal device for modifying an image to a desired size in accordance with the size of the display device (Paragraph [0001]-[0007]) by processing the image, which includes cutting out a portion of the image. While processing the image to fit the size of the display device, said aspect ratio of said image is maintained (Paragraph [0038]). By maintaining the aspect ratio when processing (reducing) the original image in accordance to the mobile device display size, said processed image would appear normal and not distorted. When changing the size of an image to fit a different display size, the aspect ratio must be maintained accordance with



Art Unit: 2628

the shape and size of the display device if the original context of the original image is to be conveyed to the user.

16. In regards to claim 5, Yu, Mukai and Kinoshita explicitly teach an apparatus for performing the method of claims 1 and 4 above.

17. In regards to claim 8, Yu, Mukai and Kinoshita both explicitly teach a computer program as applied to claim 7 above.

18. In regards to claim 3, Yu, Mukai. and Kinoshita teaches the method of claim 1, but do not explicitly teach wherein the plurality of image data sets are image data sets uploaded from the terminal. Although, Yu and Mukai are silent to said limitations, uploading images to a server is well known in the art, which allows a mobile device with limited storage space to store a plurality of image data which would normally exceed the mobile device's storage capacity on a remote server. Said remote server provides a plurality of mobile device to access the images associated with corresponding mobile device based on the specification of said mobile device. This alleviates the need for the mobile device to have a large storage space and yet access a plurality of images, and by reducing the storage capacity of the mobile device, said mobile device can be smaller and lighter. Thus, it would have been obvious to one of ordinary skill in the art to take the teachings of Yu, Mukai and Kinoshita, and to modify said teachings to allow mobile terminal devices to upload images and access said uploaded images. This alleviates the need for mobile device to have a large storage capacity, which allows said mobile device to be smaller and lighter.

19. In regards to claim 6, Yu, Mukai and Kinoshita both explicitly teach an apparatus for performing the method of claims 1 and 4 above.

20. In regards to claim 9, Yu, Mukai and Kinoshita both explicitly teach a computer program as applied to claim 7 above.

21. In regards to claim 10, Yu and Mukai explicitly teach a mobile terminal device with a rectangular display (FIG. 2 of Yu), which specifically comprises four sides of which two of the sides are longer than the remaining two sides. This is the definition of a rectangle. In addition, Yu and Mukai explicitly teach that the image requested by said mobile terminal device with a rectangular display is preprocessed in accordance with the size and shape of said mobile terminal device as applied to claims 1-9 above.

Further, the aspect ratio of said processed image is maintained throughout the image processing as taught by Kinoshita. In order to modify the image to fit the display of the mobile device, said longer side of the image must be positioned to align with the longer side of the display. This is defined and encompassed by the teachings of Yu. If said longer side of the image did not align with the longer side of the display, valuable display area will be unused and the displayed image will be smaller than necessary.

FIGS. 5A-5D explicitly teaches said limitation.

22. In regards to claim 12, Yu, Mukai and Kinoshita explicitly teach an apparatus as applied to claim 4 above.

23. In regards to claim 14, Yu, Mukai and Kinoshita both explicitly teach a computer program as applied to claim 7 above.

24. In regards to claim 11, the same basis and rationale for claim rejection as applied to claims 1 and 10 are applied. The limitations of instant claim are identical to the combination of claims 1 and 10 above. Since Yu, Mukai and Kinoshita in combination teach all limitations of claims 1 and 10, said limitations of claim 11 are also taught by Yu, Mukai and Kinoshita as applied to claims 1 and 10 above. Further, claim 11 takes the limitations of claim 1 and adds that said display of the mobile terminal device is a rectangle as applied to claim 10 above.

25. In regards to claim 13, Yu, Mukai and Kinoshita explicitly teaches an apparatus as applied to claim 4 above.

26. In regards to claim 15, Yu, Mukai and Kinoshita both explicitly teach a computer program as applied to claim 7 above.

### ***Response to Arguments***

27. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


### ***Inquiries***

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan R. Yang whose telephone number is (571) 272-7666. The examiner can normally be reached on M-F 8:30AM-5:00PM.

Art Unit: 2628

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ryan Yang  
Primary Examiner  
May 12, 2006